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09/890,663	04/04/2002	Toshikazu Yoshida	19770.0009/P009	6278

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Mark J Thronson
Dickstein Shapiro Morin & Oshinsky
2101 L Street NW
Washington, DC 20037-1526

EXAMINER

BROCKETTI, JULIE K

ART UNIT PAPER NUMBER

3713

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890,663

Applicant(s)

YOSHIDA ET AL.

Examiner

Julie K Brockett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-8,18-20,24,30,31 and 45-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-8,18-20,24,30,31 and 45-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08192004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-8, 20, 24, 45-47, 51, 52 and 55-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soltys et al., U.S. Patent No. 6,460,848 B1 in view of Soules et al., U.S. Patent No. 5,169,155. Soltys et al. discloses a card for use with a card stack reader (See Soltys Figs. 4 & 5). A housing accommodates the card stack reader (See Soltys Fig. 4). The card stack reader includes a card stack insertion inlet from which a stack of cards is inserted (See Soltys Fig. 4). Each card has a read code along a peripheral side edge (See Soltys Fig. 5). The read code identifies the card (See Soltys col. 7 lines 42-47). A card holder holds the stack of cards in an aligned condition (See Soltys Fig. 4). An imaging unit receives the reflection light from the peripheral side portion of the stack and generates an image signal indicating the read code of each card based on the received reflection light (See Soltys col. 7 lines 47-53). In looking at Figures 6 & 7, it appears as though the imaging unit receives the reflection light from the peripheral side portion of the stack in

a direction perpendicular to the peripheral side edge of each card. However, if one disagrees with this interpretation of Soltys, at the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to receive the reflected light in a direction perpendicular to the peripheral side edge of the card because Applicant has not disclosed that the direction of the received light, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Soltys' card reader and applicant's invention, to perform equally well with receiving light in any direction as long as the reflected light includes information to determine the read code on the cards. Therefore, it would have been prima facie obvious to modify Soltys to obtain the invention as specified in claims 3 and 45 because such a modification would have been considered a mere design consideration which fails to patentably distinguish over the prior art of Soltys. The read code is recorded along the peripheral side edge of the card, the read code identifies the card and when the peripheral side edge of the card is captured by the CCD camera the read code is generated (See Soltys Fig. 5; col. 6 lines 45-67; col. 7 lines 9-14) The peripheral side portion of the card stack is fully enclosed in the housing and faces the imaging unit (See Soltys Figs. 4-7) [claim 3]. The code is printed to a portion of the card adjacent to the peripheral side of the card and the code is recorded on the card (See Soltys Fig. 5) [claim 55]. The code includes a data for identifying the card and the code is recorded on the card

(See Soltys col. 10 lines 16-20) [claim 56]. The read code recorded to the card includes guide bits (See Soltys col. 6 lines 55-67) [claims 8, 61]. The read code at the peripheral side edge of the card has a data pitch for encoding that varies depending on the kind of the card (See Soltys col. 11 lines 13-23) [claims 20, 51]. Soltys further discloses a card for use with a game machine in which a stack of cards containing the card, is inserted into the game machine, and a card game is played with the game machine based on game data read from the stack of cards (See Soltys Fig. 4). The game machine includes a code reader with generates an image signal indicating codes of a peripheral side of the stack of cards (See Soltys col. 2 lines 23-26). A peripheral side contains a position corresponding to the portion of the peripheral side of the stack of cards read by the code reader of the game machine (See Soltys Fig. 4) [claim 45]. The code of the card is arranged along either a center of the peripheral side of the card or one of the edges of the peripheral side of the card and the code is arranged partially in a direction of a thickness of the card (See Soltys Fig. 5) [claim 47]. Soltys lacks in irradiating the cards with light.

Soules teaches of a light irradiation unit which irradiates a portion of the stack of cards, held by the card holder, with light so that a reflection light indicating the read code of each card is generated (See Soules col. 8 lines 12-17; col. 10 lines 35-38) [claims 3, 45, 46]. The read code is recorded to the card with a fluorescent material that is colorless under visible light (See Soules col. 8 lines 30-37) [claims 4, 46, 57]. The read code is recorded to the card

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with a plurality of fluorescent materials that generate different color light rays by the irradiation with light (See Soules col. 8 lines 12-37; col. 9 lines 43-54) [claims 5, 46, 58]. The read code is recorded with a fluorescent material that generates an infrared light ray by the irradiation with light (See Soules col. 8 lines 30-37) [claims 6, 59]. The read code is recorded to the card with a fluorescent material that generates a light ray having a wavelength longer than a wavelength of a blue light, by the irradiation with light (See Soules col. 9 lines 42-48; col. 10 lines 35-38) [claims 7, 60]. The read code is recorded to the card with a light storage material (See Soules col. 10 lines 60-66) [claims 24, 52]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the various fluorescent material to record the read codes on the cards and then have it read by irradiated light. Soltys states that it is advantageous to use ink that is not typically visible to humans such as ink that is only visible in the infrared portion of the electromagnetic spectrum (See Soltys col. 7 lines 19-28). Therefore it would have been obvious to implement the cards with fluorescent codes in Soules into the invention of Soltys. By using the encoding and reading capabilities of Soules the ink would be invisible thereby making the bar code symbols difficult to detect and read which makes the cards unobtrusive to the players.

Claims 18, 19, 30, 31, 48-50, 53 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soltys et al., in view of Soules et al., in further view of Cuff et al., U.S. Patent No. 4,534,562. Soltys and Soules

lack in disclosing reading a front and back of the card. Cuff teaches of a card that is configured such that the read code at the peripheral side edge of the card read by the card stack reader from one direction of the card is different from the read code by the card stack reader from another direction of the card. Therefore the direction the card is placed is detected by the game machine (See Cuff Fig. 1; col. 4 lines 36-47) [claims 19, 49, 50]. Cuff further teaches that the read code includes data bits each indicating a binary value of the read code (See Cuff col. 3 lines 50-60). One of the bits indicates the direction of the card and edge bits are used indicating respective positions of a start and an end of the code (See Cuff Fig. 1) [claim 30, 53]. Each of the data bits, the direction bit and the edge bits has a predetermined width along the peripheral side edge of the card (See Cuff Fig. 1) [claim 31, 54]. Therefore the card has two sides where different codes are provided and a plurality of different read codes are provided at the peripheral side edge of the card (See Cuff Fig. 1) [claims 18, 48]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to read different codes from the front or back surface of a card. By reading codes from different card directions, the reader can determine whether or not the card is facing the correct direction and regardless of which direction the card was input to the reader, the cards identity is determined. It is also obvious to have bits that help the reader determine the start and end of the code. These types of starting/ending bits are well known throughout the

art. They are used so as to ensure that the complete codes are being read from by the reader; consequently, all of the significant code bits are being read.

Response to Amendment

It has been noted that claims, 3, 45 and 47 have been amended.

Response to Arguments

Applicant's arguments filed January 11, 2005 have been fully considered but they are not persuasive.

Applicant alleges that Soltys discloses a card deck reader in which a code is recorded along a front corner of a card and in Soltys the reader is positioned to read a portion of the front face of each card. Applicant further claims that Soltys' reader is not even exposed to the "peripheral side portion" of the stack of cards. The Examiner disagrees. While the Examiner does understand the differences between Applicant's invention and Soltys, Applicant's claim language is still too broad and Soltys reads on Applicant's language. In Soltys the card has a code written on the peripheral edge of one side of the card, i.e. the face side. Therefore the card reader reads "peripheral side portion" or the "peripheral side edge" of the card.

Applicant alleges that Soltys lacks in receiving reflection light from the peripheral side portion of the stack in a direction perpendicular to the peripheral side edge of each card. The Examiner notes that Figure 8 is a

second embodiment of Soltys' invention and for this limitation she is relying on Figures 4-7 which show a first embodiment of Soltys. For example as seen from figures 5 & 6 the stacks are very straight and vertical and the image detection device as seen in Figure 7 is also very straight and not slanted. Therefore, it is obvious to assume that the imaging unit is receiving light in a direction perpendicular to the peripheral side edge of each card. Nevertheless, if Applicant disagrees with this interpretation of Soltys, the Examiner notes that it is a design choice as to what direction the light is received. It doesn't matter in what direction the light is received as long as the device is capable of receiving the image and reading the code.

Applicant further argues that Soltys and are not able to be combined based on the fact that Soltys system requires that the card-identifying information be contained close to a front corner on each card, such that when the card deck is tilted, the information containing corner of each card is exposed to the reader while in Soules' system, the infrared or ultraviolet source requires that the entire card is scanned to determine its characteristics. The Examiner disagrees and notes that Soltys and Soules are capable of being combined and furthermore one would be motivated to combine them. Contrary to Applicant's assertion, one does not have to scan the entire card in Soules to read the information. One embodiment shows the codes on the peripheral edge of the card, just as in Soltys. Only the peripheral side edge of the card

has to be scanned for the card code to be read (See Soules Fig. 4; col. 10 lines 39-59).

The Examiner further notes that Soltys in Figures 4, & 7, not Figure 8, recites Applicant's limitation that the peripheral side portion of the card stack is fully enclosed in the housing and faces the imaging unit.

As stated previously the Examiner does appreciate the differences between Applicant's invention and Soltys. However, the claim language is still too broad that it reads on Soltys. The Examiner suggests some sort of claim language that states that the deck is not spread out when it is read and that all cards are read at once with the cards in the deck flush against one another and maintaining the dimensions of one card so as to overcome Soltys which reads the cards when they are flush against one another but spread out, thereby allowing the peripheral edge of the face side to be read. The Examiner also recommends that Applicant look at U.S. Patent No. 3,034,643 before making any amendments to the claims. The Examiner is not saying that this language would be allowable, just that it might help Applicant get over the Soltys reference.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie K Brockett whose telephone number is 571-272-4432. The examiner can normally be reached on M-Th 8:00-5:00.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Julie K Brockett
Primary Examiner
Art Unit 3713